

On-demand Car Park Ventilation from XTRALIS

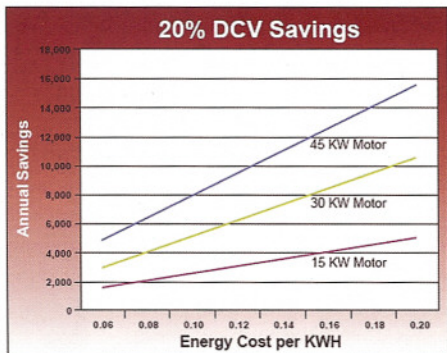


Demand controlled ventilation reduces energy costs

In most enclosed or underground car parks toxic gases from vehicle exhaust, such as carbon monoxide (CO) and nitrogen dioxide (NO₂), present a health risk to the general public and personnel. The risk of toxic gas poisoning in these enclosures is normally reduced or removed by natural or mechanical ventilation. While this approach is effective, the costs of continuous ventilation are very high.

Extending its Vesda aspirating smoke detection (ASD) technology, XTRALIS has introduced what it says is the industry's first system to combine ASD with gas detection and environmental monitoring. Vesda ECO uses an existing Vesda pipe network to actively sample air for the presence of smoke, as well as combustible or toxic gases or for oxygen deprived areas.

In car parks and loading bays, Vesda ECO can be used to continuously monitor toxic gases, such as CO and NO₂, to trigger demand controlled ventilation (DCV), so reducing energy cost. Many industries commonly use DCV, and



engineers are well aware of the cost involved in running even medium-sized electric fans. For example, a single, 30 kW, 3 PH, 4-pole electric fan running 24 hours a day, seven days a week and at 16 cents for each kW/hr equates to an annual cost of \$42,000.

Xtralisis cites savings of \$8,000 to \$16,000 a year if Vesda ECO is used to trigger DCV, which saves 20 percent to 40 percent respectively, and reduced carbon emissions alone are a strong justification for using such gas detection equipment.

Field tests conducted in Australia in a Brisbane underground bus station and a Melbourne office building's loading bay have proved that Vesda ECO combined with Vesda ASD – when compared with conventional point (spot) type gas and smoke detectors – provides a holistic approach to detecting smoke and gases for the added protection of life, property and business continuity.

**For more information, go to
www.xtralisis.com**